

Patent Claims:

1. A milling head for milling chamfers, in particular
for a mobile chamfer mill, with successive seats
5 for cutting dies, characterized in that the seats
(6-8; 23-26; 31-33; 37-40) have a position in
which the cutting dies (3; 28; 31) provided, which
have a wedge angle of 40-75°, in each case operate
on average with a positive rake angle of at least
10 6° and with a clearance angle of at least 6°, and,
for a fitting with cutting dies (3; 28; 41) in an
offset arrangement of the cutting edges, are
provided in such a way that in each case only one
cutting edge length, which amounts at most to 70%
15 of the overall cutting edge length required
according to the chamfer width, is effective.
2. The milling head as claimed in claim 1,
characterized by an effective cutting edge length
20 of the cutting dies (3; 28; 41) provided of at
most 30 mm, preferably at most 15 mm, in
particular at most 12 mm.
3. The milling head as claimed in claim 1 or 2,
25 characterized in that the cutting edge or cutting
edges (17) of the cutting dies (3; 41) provided is
or are angled obliquely (49) at its or their ends
in each case by means of a chamfer (50) of the
cutting die.
- 30 4. The milling head as claimed in claim 1 or 2,
characterized by an arrangement of the seats (47;
48) such that the cutting edges (17) are oriented
obliquely at a small angle with respect to the
35 generatrix of the milling head (44).
5. The milling head as claimed in one of claims 1 to
4, characterized in that the cutting dies provided

are designed as reversible dies (3; 28; 41) and, on the whole, parallelepipedal with two wide sides, and the seats have a bearing surface (4) per one wide side and a supporting surface (9), transmitting the thrust force, for a narrow side, or vice versa, and the reversible dies (3; 28; 41) have, on the side facing away from the supporting surface (9), a groove which forms two faces (10) and which, if appropriate with the exception of any indentations and/or protuberances of their margins forming the cutting edges, has a continuously uniform cross section mirror-symmetrical with respect to the center plane of the reversible die, the two faces (10) being planar and preferably being at an angle of 80 to 160° to one another or being concave correspondingly to a groove of round cross section.

6. The milling head as claimed in one of claims 1 to 5, characterized in that the reversible dies (28; 41) provided have on their wide sides recesses (29; 42) interrupting the cutting edge or cutting edges (30; 43).

7. The milling head as claimed in one of claims 1 to 6, characterized in that seat designs (2; 21; 47; 48) extend over the entire generatrix of the conical or cylindrical milling head (1; 20; 44), and different seats (6-8; 23-26) for the cutting dies (3) have differently arranged threaded bores (5) for a fastening screw (16) of the cutting die (3).

8. The milling head as claimed in one of claims 1 to 6, characterized in that, on a conical or cylindrical milling head (34; 44), the seats (37-40; 47; 48) are arranged in two coaxial rows, and the milling head (34; 44) is composed of two

segments (35; 36; 45; 46) in each case having one of the rows.

- 5 9. The milling head as claimed in one of claims 1 to 6 or 8, characterized in that, on a conical milling head (34), the seats (37-40) are arranged in two coaxial rows, and the outer row has twice as many seats (37; 38) as the inner row.
- 10 10. The milling head as claimed in one of claims 1 to 9, characterized in that it is provided with a guide mounted in its vicinity on the respective machine (51; 62) and taking the form of stops (54; 56; 63; 64) which are assigned to the two surfaces 15 (57; 60) of the workpiece which delimit the chamfer (49; 66).
- 20 11. The milling head as claimed in claim 10, characterized in that, where a cylindrical milling head (2) is concerned, the stops are sliding strips (63; 64) or strips (63; 64) provided with rollers, or the like.
- 25 12. The milling head as claimed in claim 10, characterized in that, where a conical milling head (1) is concerned, one stop is a disk (56) preferably axially displaceable and fixable with respect to the milling head (1), and the other stop is a freely rotatable roller (54) which 30 preferably has only a narrow annular stop surface at its axial end facing the milling head (1).